

MAY 12 2006

K061187  
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## 510(k) Summary

**Date:** April 10, 2005

**Submitter's Name:** Toshiba America Medical Systems, Inc.

**Submitter's Address:** P.O. Box 2068, 2441 Michelle Drive,  
Tustin, CA 92781-2068

**Submitter's Contact:** Paul Biggins, Regulatory Affairs Specialist,  
(714)730-5000

**Establishment Registration Number:** 2020563

**Device Proprietary Name:** TSX-201A Aquilion LB with Respiratory Gating

**Common Name:** Scanner, Computed Tomography, X-Ray  
[Fed. Reg. No. 892.1750, Pro. Code:  
90JAK]

**Regulatory Class:** II (per 21 CFR 892.1750)

**Performance Standard:** 21 CFR Subchapter J,  
Federal Diagnostic X-ray Equipment  
Standard

**Predicate Device(s):** TSX-201A Aquilion LB k050458  
Varian HPM k983629

**Reason For Submission** Modification of cleared device

### Description of this Device:

The CKRS-003A Respiratory Gating Option will be added to the previously cleared TSX-201A Aquilion LB CT system. This addition requires hardware and software modifications to the existing device.

### Summary of Intended Uses:

This device is designed to produce cross-sectional images of a human body by reconstruction of x-ray transmission data from the same axial plane taken at different angles. These images have been proven to be clinically useful in the diagnosis of spine and head injuries, intracranial tumors, blood clots in the brain, eye trauma, soft tissue lesions in the extremities, gastrointestinal lesions, abdominal and pelvic malignancies, and hepatic metastases. CT is also used to evaluate intestinal obstructions, assess intra-abdominal abnormalities and to

examine musculoskeletal degeneration. Additionally this device will employ respiratory gating to reduce motion artifacts and improve targeting of anatomy for use with other cleared devices. This device employs no intended uses that are not in cleared devices already found in the marketplace.

**Technological Characteristics:**

This package is similar in uses and applications as those of the predicate devices. The main difference is in the method used to obtain the final results.

**Safety and Effectiveness Concerns:**

This device is designed and manufactured under the Quality System Regulations as outlined in 21 CFR § 820. All requirements of the Federal Diagnostic Equipment Standard, as outlined in 21 CFR § 1020.30 and 1020.33, that apply to this upgrade, will be met and reported via a supplement to the initial report for the predicate device. Additionally this system is in conformance with the applicable parts of the IEC 60601-1 {applicable portions}; IEC 60601-2-32 and IEC 60601-2-44. - Medical Device Safety standards.

**Substantial Equivalence:**

Toshiba TSX-201A, Aquilion LB CT cleared via k050458  
Varian RPM Respiratory Gating System cleared via k983629

Toshiba America Medical Systems, Inc. believes that the combination of the two devices does not change the intended use of either device.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Food and Drug Administration  
9200 Corporate Blvd.  
Rockville MD 20850

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Toshiba America Medical Systems, Inc.  
% Mr. Mark Job  
Responsible Third Party Official  
Regulatory Technology Services LLC  
1394 25<sup>th</sup> Street NW  
BUFFALO MN 55313

Re: K061187

Trade/Device Name: Toshiba TSX-201A, Aquilion LB CT System with Respiratory  
Gating (CKRS-003A)

Regulation Number: 21 CFR 892.1750

Regulation Name: Computed tomography x-ray system

Regulatory Class: II

Product Code: JAK

Dated: April 25, 2006

Received: April 28, 2006

Dear Mr. Job:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.



*Protecting and Promoting Public Health*

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

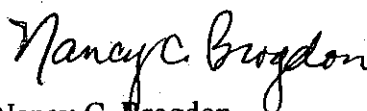
This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at one of the following numbers, based on the regulation number at the top of this letter:

21 CFR 876.xxxx	(Gastroenterology/Renal/Urology)	240-276-0115
21 CFR 884.xxxx	(Obstetrics/Gynecology)	240-276-0115
21 CFR 892.xxxx	(Radiology)	240-276-0120
Other		240-276-0100

Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>

Sincerely yours,



Nancy C. Brogdon  
Director, Division of Reproductive,  
Abdominal, and Radiological Devices  
Office of Device Evaluation  
Center for Devices and Radiological Health

Enclosure

510(k) Number (if known): K061187

Device Name: Toshiba TSX-201A, Aquilion LB CT System with Respiratory Gating (CKRS-003A)

Indications for Use:

X-ray imaging of whole body - Computerized Tomography

Including:

Axial  
Volumetric (Helical)  
CT Fluoroscopy  
Respiratory (4D) Gated Scanning

Respiratory Gated (4D) Scanning on the Aquilion LB is a non-invasive software/hardware option that can be used for the evaluation of respiration-induced motion by acquiring and displaying CT images consisting of all respiratory phases during a breathing cycle

(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)

\_\_\_\_\_  
Concurrence of CDRH, Office of Device Evaluation (ODE)

Prescription Use X  
(Per 21 CFR§801.109)

OR

Over-The-Counter Use \_\_\_\_\_

(Optional Format 1-2-96)

David A. Lyman  
(Division Sign-Off)  
Division of Reproductive, Abdominal,  
and Radiological Devices

510(k) Number

K061187